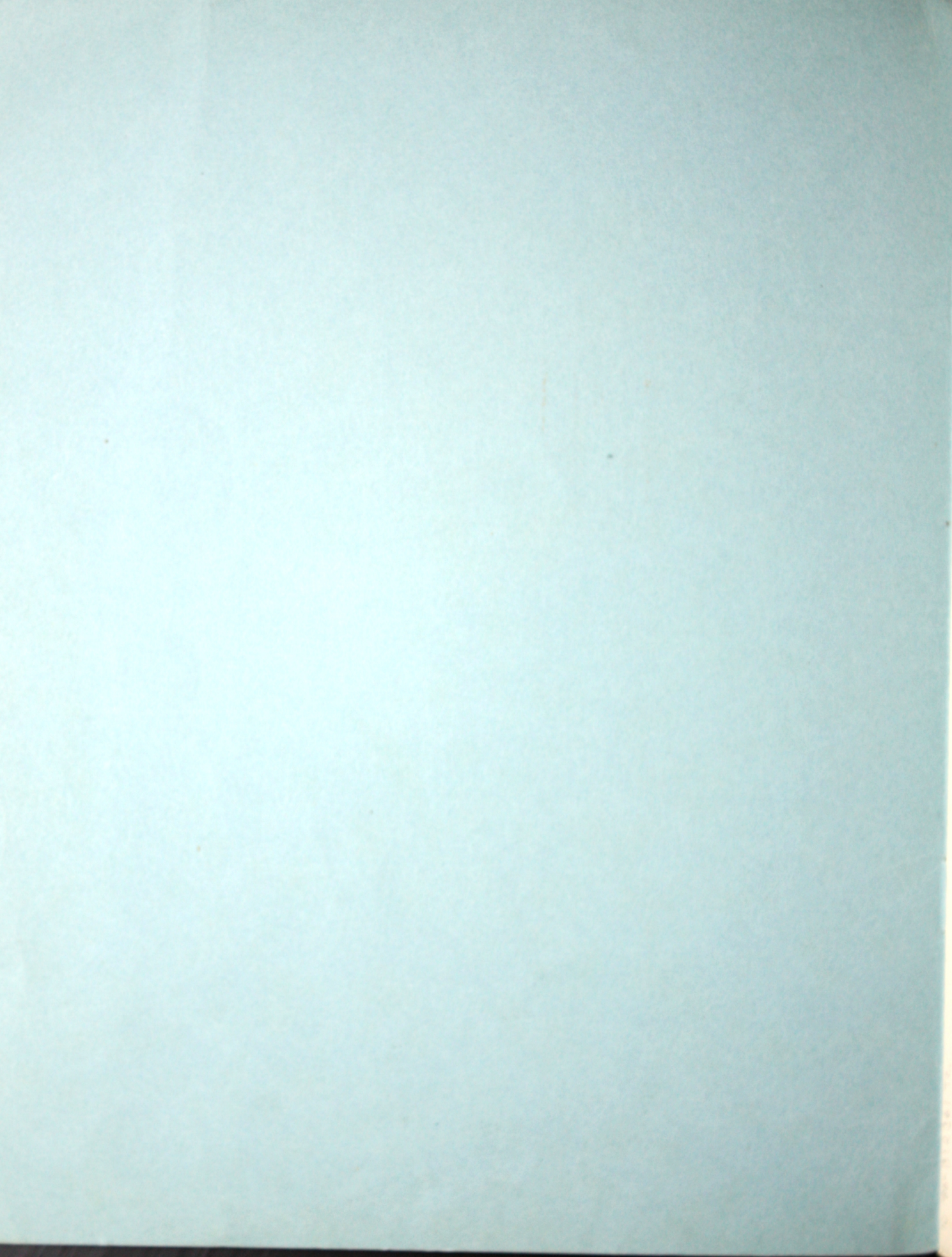


THORN MANOR CASEMENTS

JOHN H. MILLARD
American Casualty Bldg.
Reading, Penna.
Phone 3-2221



SPECIFICATIONS

ALL openings except as otherwise noted shall be fitted with Thorn "Manor" Casements of types and sizes shown, as manufactured by the J. S. THORN COMPANY of Philadelphia, Pa., or equal only as approved by the Architect.

They shall be square and true and constructed of one piece channel leg framing sections not less than 1¼" deep and shaped for perfect double flat contact between frames and sash. Corners of frames and sash shall be mitered, electrically welded and ground to a smooth finish. Muntin bar joints shall be flush and welded.

All casements shall be equipped with Thorn bronze friction cleaning hinges, adjusted to hold sash open at any angle. Fasteners shall be Thorn Scroll type, light statuary finish, solid bronze, mounted on ornamental plates, electrically welded to sash.

Casements shall be given two sprayed coats of elastic grey enamel at the factory, each separately baked on.

They shall be fitted in the openings by skilled mechanics and shall be bedded and pointed with Thorn mastic cement. All work must be neat, accurate and weather-tight.

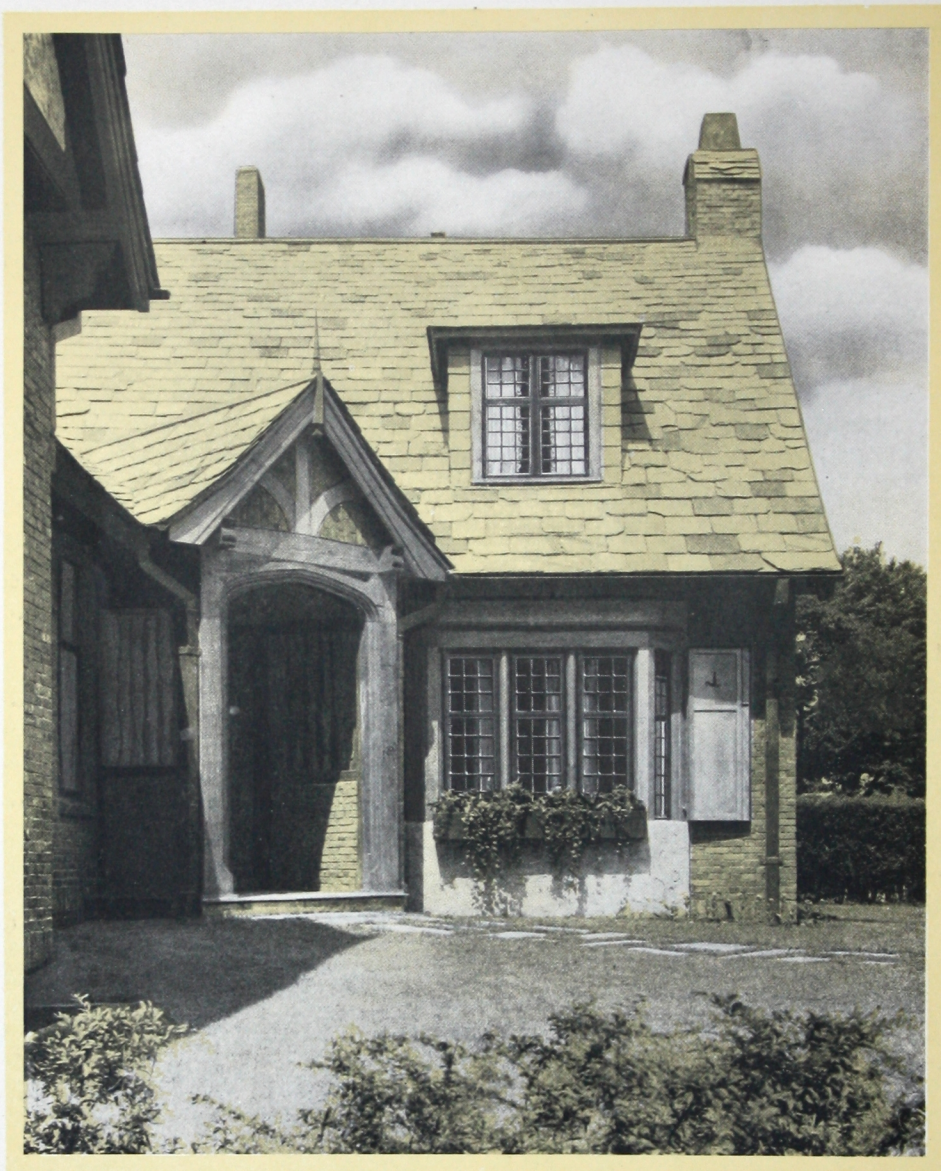
J. S. THORN CO.
PHILADELPHIA

NEW YORK

BOSTON

Catalog MC1

February, 1927



"Beauty is the highest principle and the highest aim of art."—GOETHE.

Famous architects of the past recognized the beauty of the casement.
Famous architects of today will recognize the unsurpassed beauty and
utility of the "Manor."

THE MANOR CASEMENT

IT was the metal craftsman of the Sixteenth Century who first introduced the metal casement. It was the pride in his handicraft that made this window charming and beautiful, although lacking in practical merit. Charm and beauty have identified the casement through the centuries following and have associated it with the finest of architecture.

The casement has now reached a state of advancement where it is not only a window of great beauty, but of great utility as well.

The steel mills of today are capable of producing steel sections of the most unusual shapes with great uniformity and accuracy, and these sections, properly treated and assembled, will produce a window weathertight under the most exacting conditions, which will offer the minimum obstruction to daylight and which is unaffected by atmospheric conditions and therefore will not warp, shrink or swell.

Modern skill has again spoken in the development and standardization of a casement, particularly adapted to leaded glass work, made of carefully designed, accurately rolled sections, fitted with the peerless Thorn Cleaning Hinge with friction control and beautiful bronze hardware, and which will blend harmoniously with materials used in the finest of buildings—The “Manor.”

The design of the sections of which this window is made incorporates refinements of the most minute nature to gratify modern architectural desire for a sturdy, well-made casement, particularly adapted to leaded glass, with neat, narrow sight lines and short putty bevels. The putty stop, rolled on the sections, is a guide for the glazier in forming equal, clean, sharp bevels and will eliminate the ragged putty finish so often found where the tapering putty line meets the muntin bar.

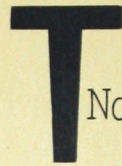
The famous Thorn Hinge, strong, pleasing to the eye and unequalled in performance, is standard equipment, and the smooth movement of this snug-fitting hinge on its bronze dovetail track makes the operation of this window a pleasure.

The “Manor” is an accomplishment in steel window craft befitting the finest architecture.

SECTIONS
FULL SIZE



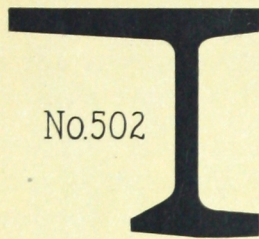
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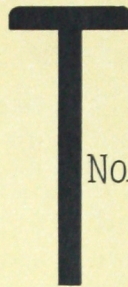
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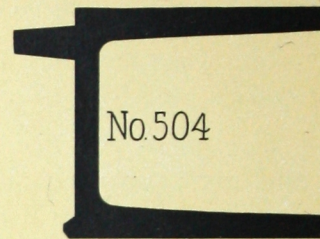
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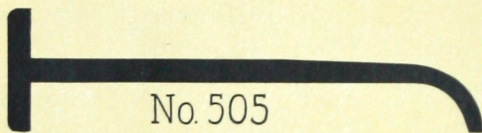
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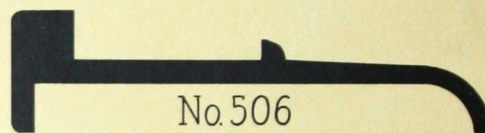
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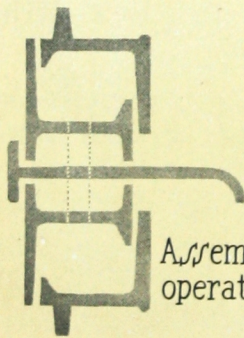
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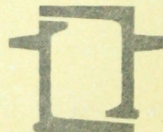
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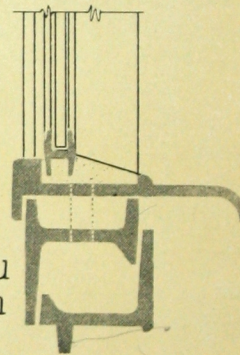
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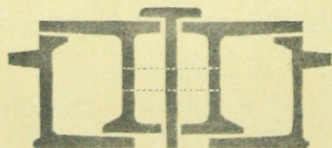
Assembly thru
operated transom



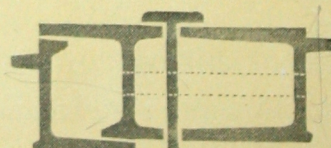
Section thru meeting rail
of double leaf casement



Assembly thru
fixed transom

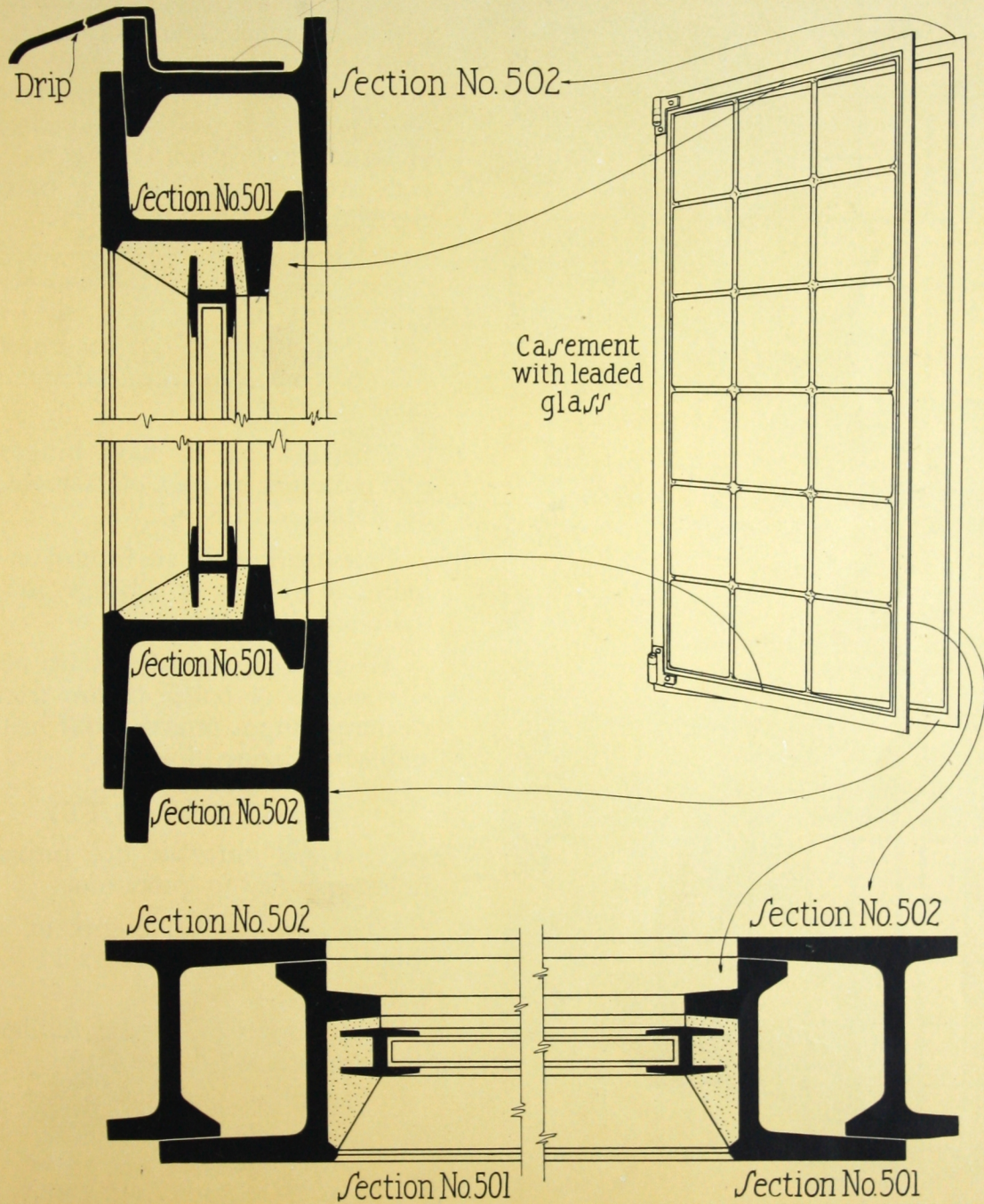


Assembly thru vertical mullion
with two casement units



Assembly thru vertical mullion
with fixed and Casement Unit

CONSTRUCTION DETAILS
FULL SIZE



STANDARD TYPES

All sizes shown are wall opening dimensions. Actual sash sizes are $\frac{1}{4}"$ less.

If two or more units are joined together by standard steel mullions, the opening size is determined by adding the actual sizes of the units together ($\frac{1}{4}"$ less than sizes shown on schedule of standard type units) plus $\frac{3}{16}"$ for each mullion, plus $\frac{1}{4}"$ for opening clearance:

$$i.e., \text{Unit size} = \text{Standard type size} - \frac{1}{4}"$$

$$\text{Opening dimension} = \text{sum of unit sizes} + \frac{3}{16}" \text{ for each mullion} + \frac{1}{4}"$$

Units marked "T" are for transoms and open out at bottom and are indicated thus: Δ

Units marked "R" have hinges on side indicated by apex of triangle and are indicated thus: $<$

Units marked "L" are hinged on side indicated by apex of triangle and are indicated thus: $>$

All units are furnished with necessary screws or bolts, bronze friction cleaning hinges, bronze scroll handles and wire glazing clips.

GLASS AND PUTTY

Glass and putty are not furnished unless specified in quotation.

Glass size for all lights in steel muntin types (M) is $8\frac{1}{4}" \times 11"$.

(See Note)

Leaded glass panel size for leaded glass types is as follows:

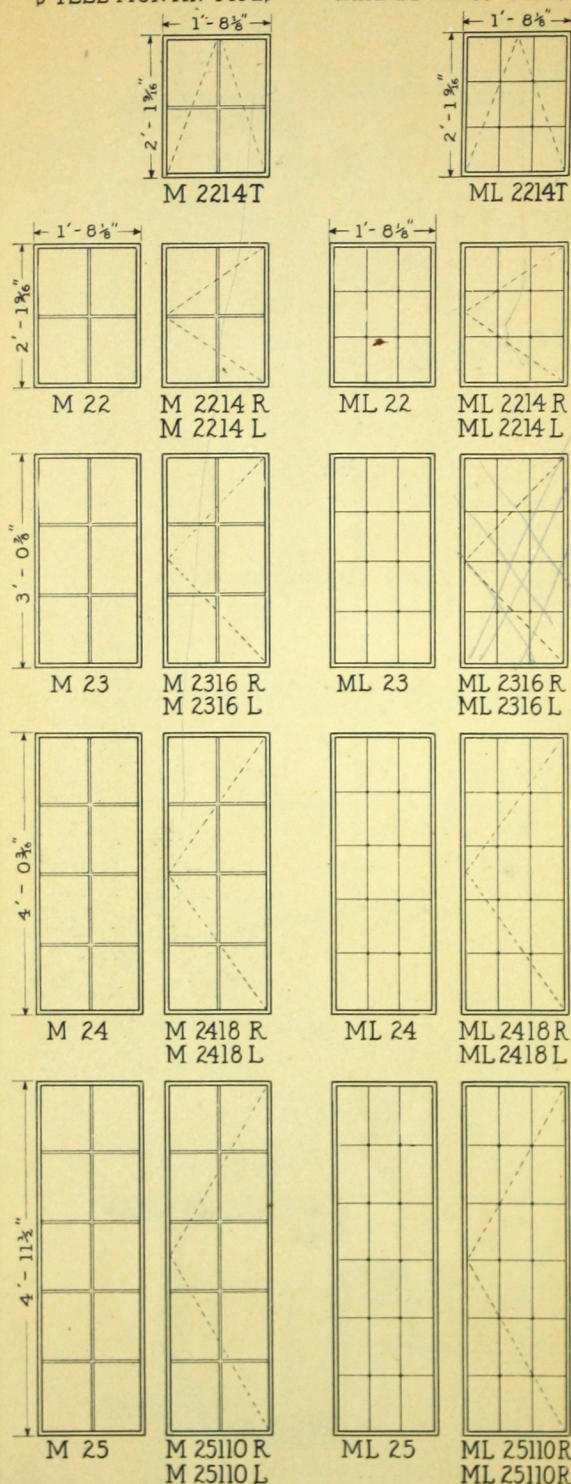
ML 22—ML 2214	$16\frac{1}{8}" \times 22\frac{1}{4}"$
ML 23—ML 2316	$16\frac{1}{8}" \times 33\frac{9}{16}"$
ML 24—ML 2418	$16\frac{1}{8}" \times 44\frac{7}{8}"$
ML 25—ML 25110	$16\frac{1}{8}" \times 56\frac{3}{16}"$

(See Note)

NOTE: If transom bar No. 506 is required, the sash unit becomes special and special size lights are required.

STEEL MUNTIN TYPE

LEADED GLASS TYPE



EXTERIOR ELEVATIONS

All units are indicated as right hand



THORN FRICTION CLEANING HINGE OF SOLID BRONZE

The Thorn Friction Cleaning Hinge is standard equipment on the Manor type casement.

It is a three knuckle hinge with a driven fit steel pin and is of especially sturdy construction to carry the weight of leaded glass.

The center knuckle is integral with a sliding shoe machined to snugly fit over a dovetail, extruded bronze track on which it rides.

A steel support arm pivoted on the end of the track and to the casement leaf draws the sliding shoe on the track and causes the casement leaf to ride away from the jamb of the window in a straight line, as the leaf is opened.

A friction control is provided in each hinge by means of a steel spiral spring and two convex washers inserted in a counterbored, bronze barrel extension to the central knuckle of the hinge, located directly over the dovetail guide. An adjustable screw puts the spring in compression, controlling the friction applied by the lower washer directly against the surface of the dovetail guide, providing firm friction adjustment for the casement leaf in any desired position.

This hinge of solid, time-resisting bronze, developed by Thorn, has accomplished a five-fold purpose, i. e.:

It brings the outside surface of the glass in outswinging casements within easy access from the inside for cleaning.

It retains the beauty for which the casement has always been known in accomplishing the above feature, by retaining the appearance of the standard butt hinge.

It eliminates the sill adjuster and thereby prevents the rattling of the sash in the wind.

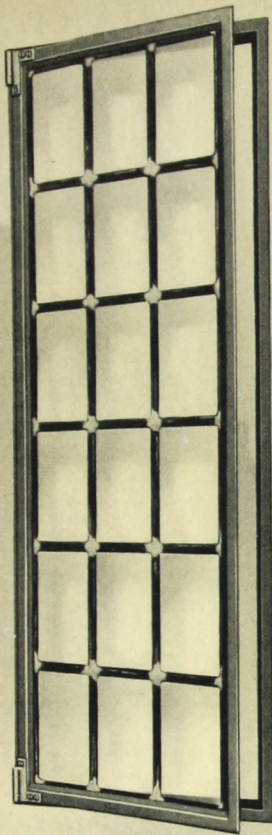
It holds the sash firm at the top as well as at the bottom, thus preventing the top of the sash from whipping, which is bound to occur where the bottom only is held by an adjuster.

It draws the casement leaf snugly into the frame, making a tight contact between frame and sash.

When the casement leaf is closed, the hinge has much the same appearance as an ordinary butt hinge, as it does not project outward from the casement like the unsightly standard extension hinge of the cottage casement, which also accomplishes the glass cleaning feature, but at a great sacrifice—beauty.

As the casement leaf is opened it is carried away from the jamb and when fully opened a clearance of five inches is provided, allowing plenty of arm room for the cleaning of the outside glass surface from the inside of the building.

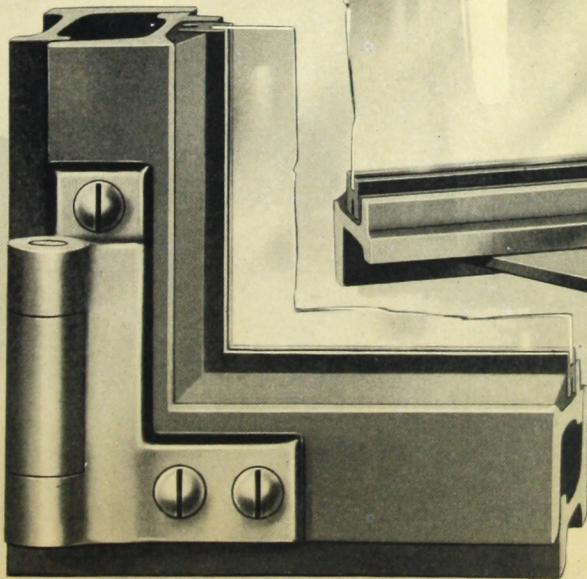
The process of attaching these hinges is such that weathertightness between frame and leaf is assured. The hinges are attached by adjustable screws, the leaf is then carefully fitted to the frame, held securely, and the screws tightened and welded so that this correct hinge position is permanent.



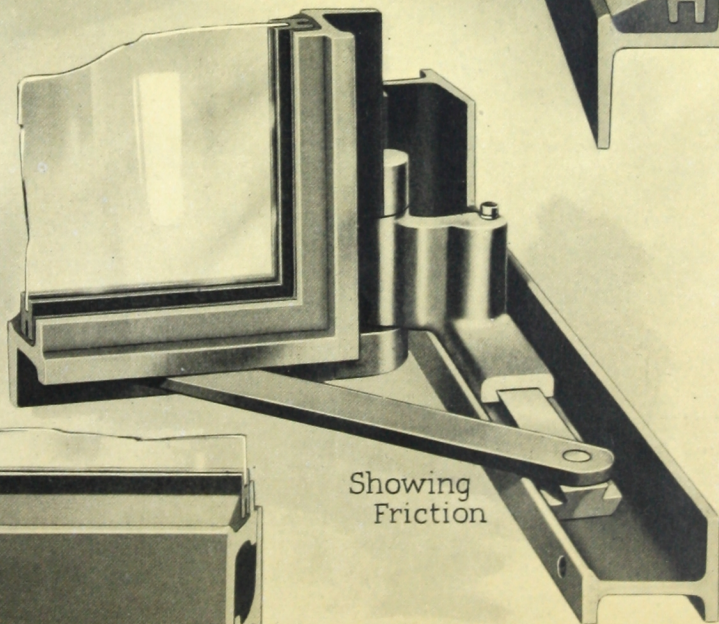
Casement With Leaded Glass
Equipped With Cleaning Hinge



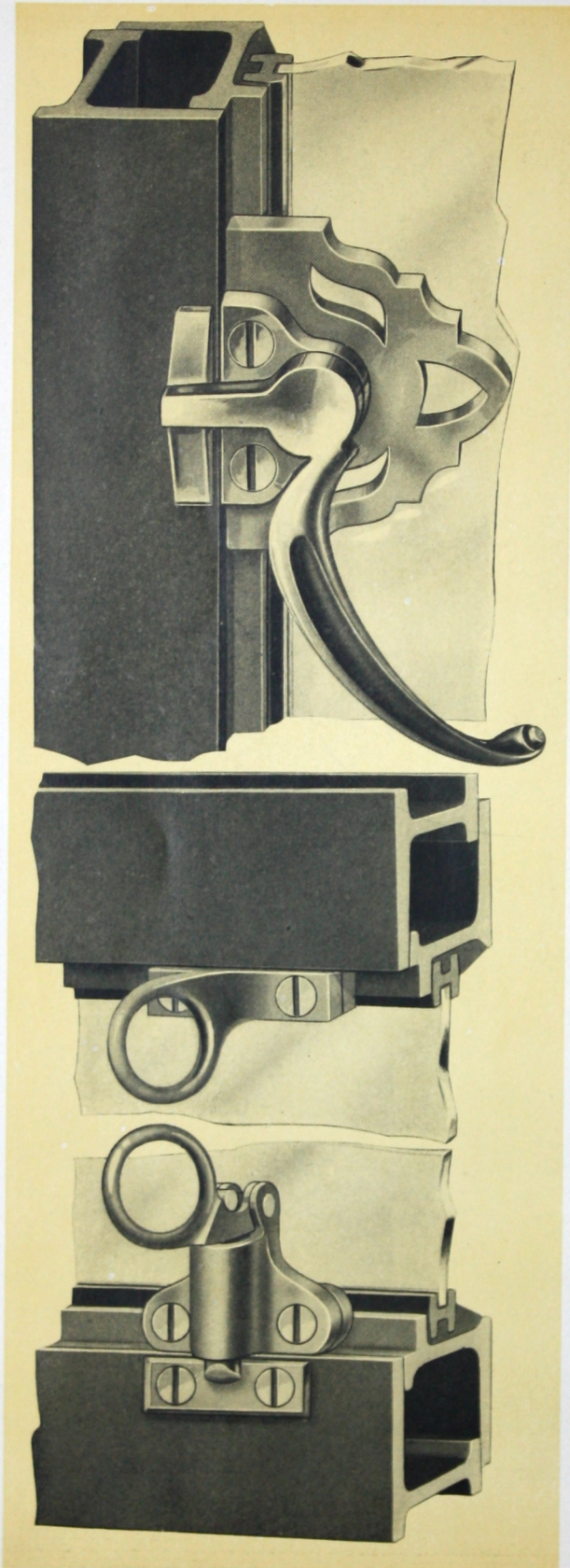
Casement Opens For
Inside Cleaning



Closed Position



Showing
Friction



HARDWARE

SCROLL HANDLE No. 200

This handle is furnished as standard equipment. It is of solid bronze, light statuary finish, mounted on an ornamental wrought iron plate, welded to the casement section.

A bronze striking wedge attached to the frame section of the casement permits the handle to draw the leaf tightly up to the frame, insuring weathertightness.

SPRING CATCH AND POLE RING

The spring catch and pole ring are furnished for all transom units.

They are of solid bronze, light statuary finish to match the casement handles, and are mounted on backing plates welded to the sash bars.

The spring catch is for pole hook operation.

To open the transom the pole hook is engaged in the ring of the catch and the catch released. At the same time the transom is pushed slightly outward.

The hook is then engaged in the ring at the top of the transom and pulled down to the desired opening.

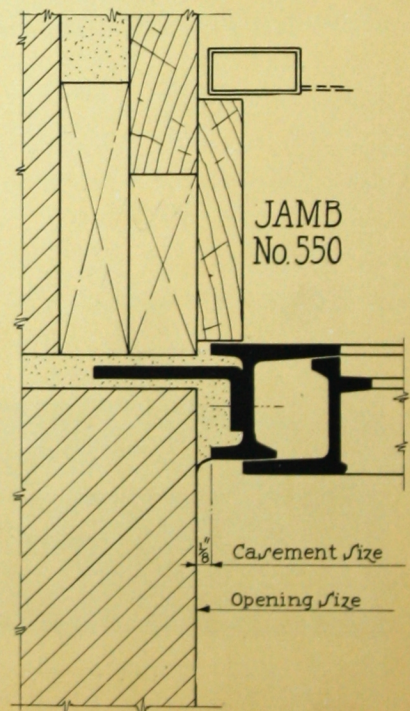
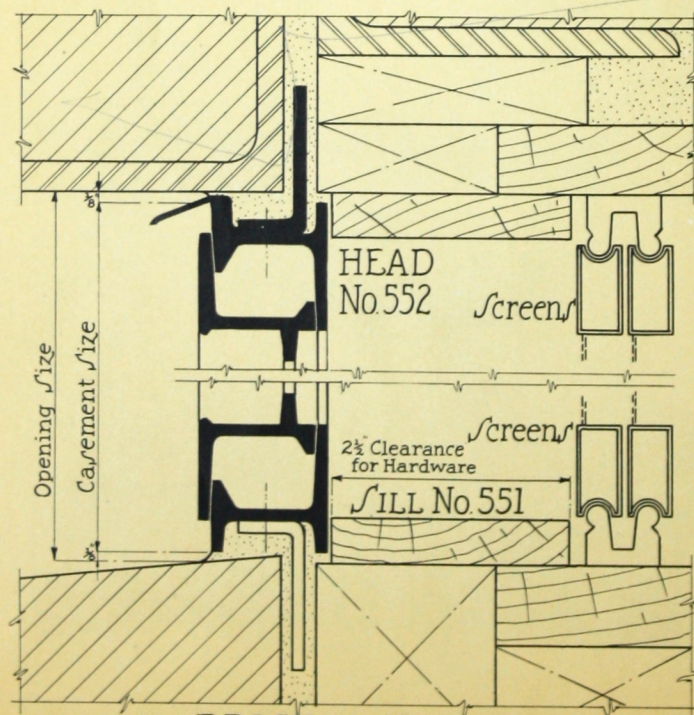
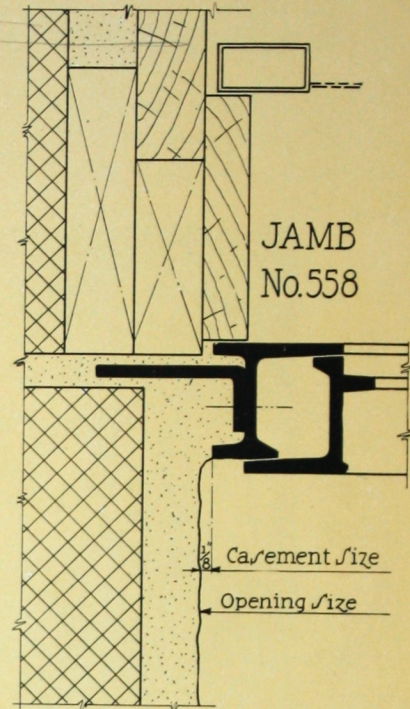
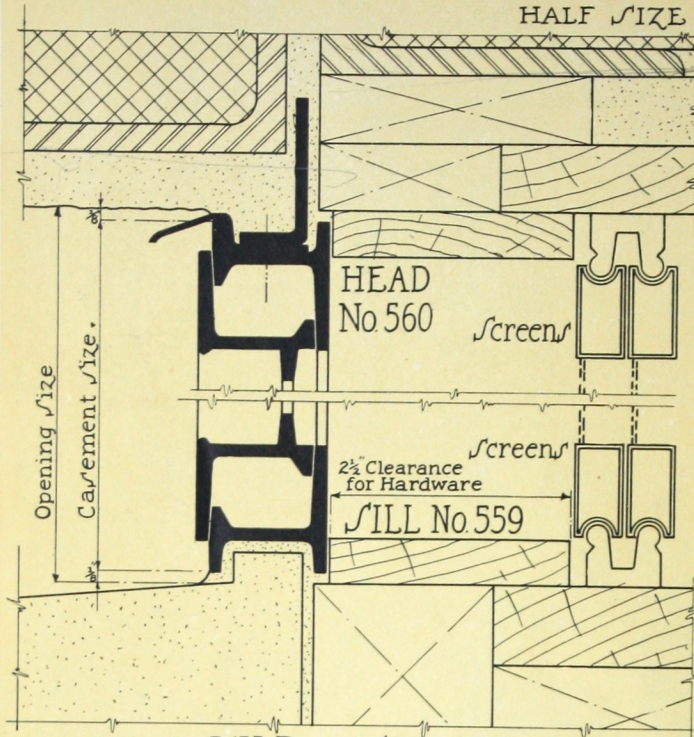
SPECIAL HARDWARE

Hardware of special patterns and fittings for cord operation will be furnished if desired at an extra cost.



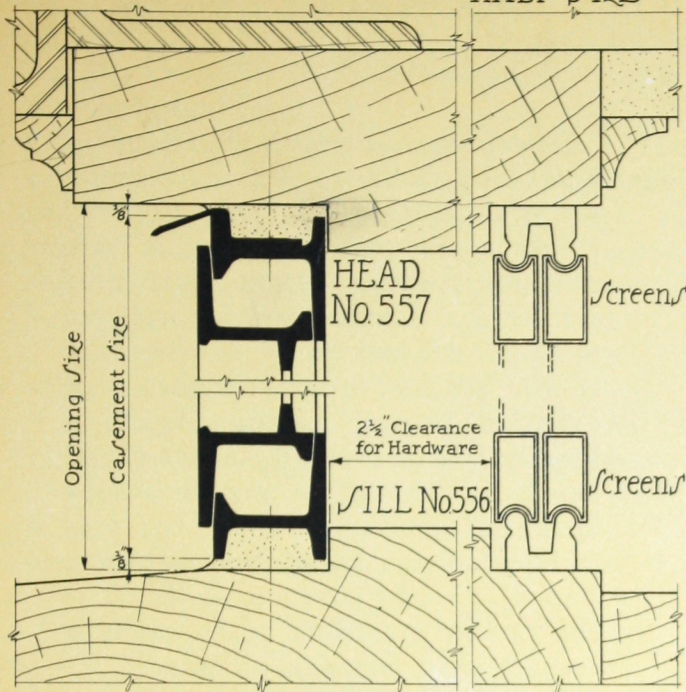
INSTALLATION DETAILS

HALF SIZE

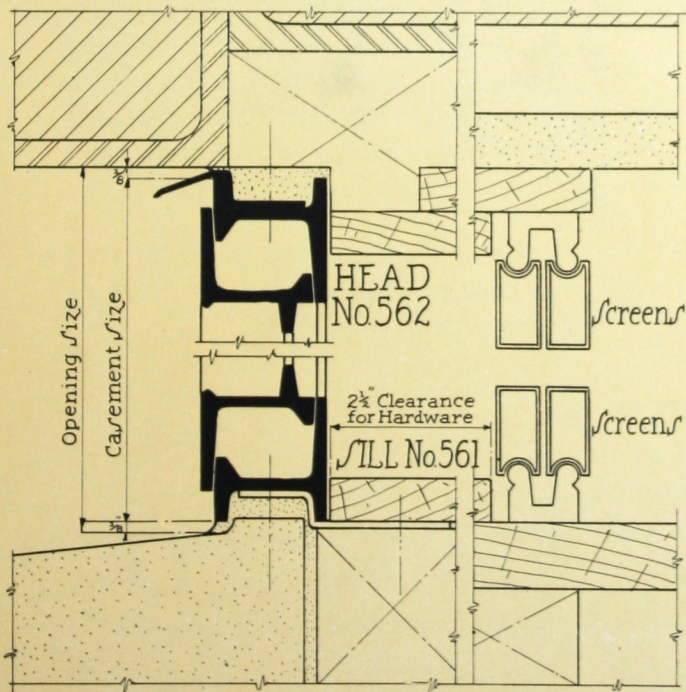
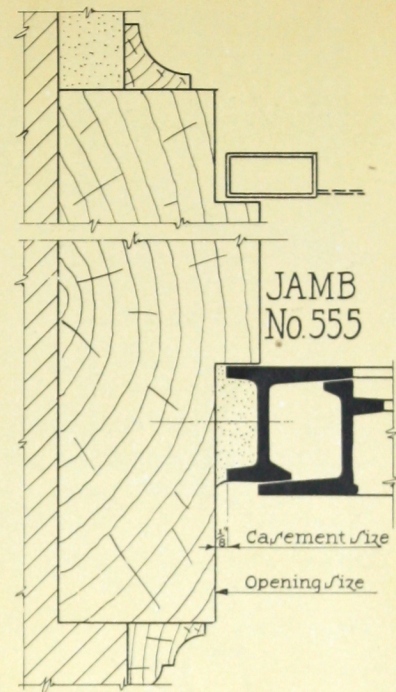


INSTALLATION DETAILS

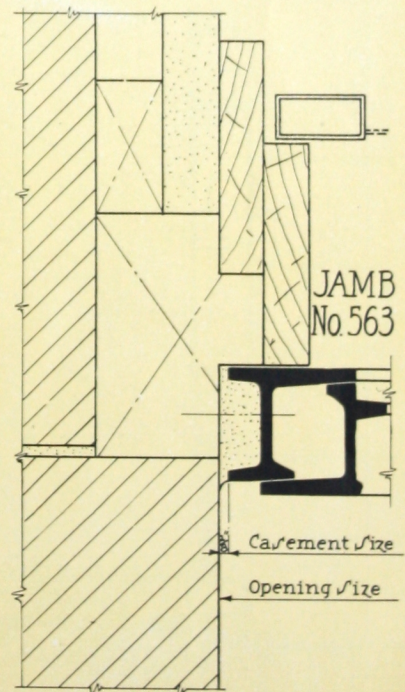
HALF SIZE



WOOD FRAME



WOOD BUCK



THORN FRENCH CASEMENT DOORS

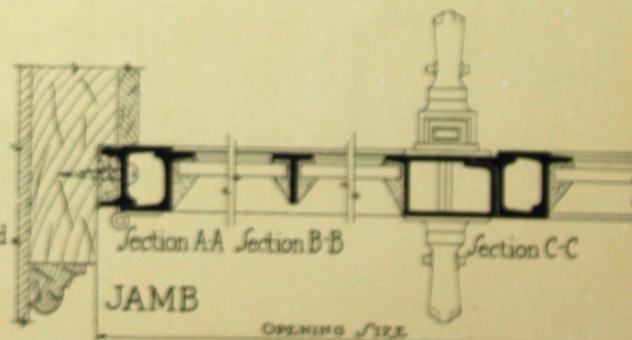
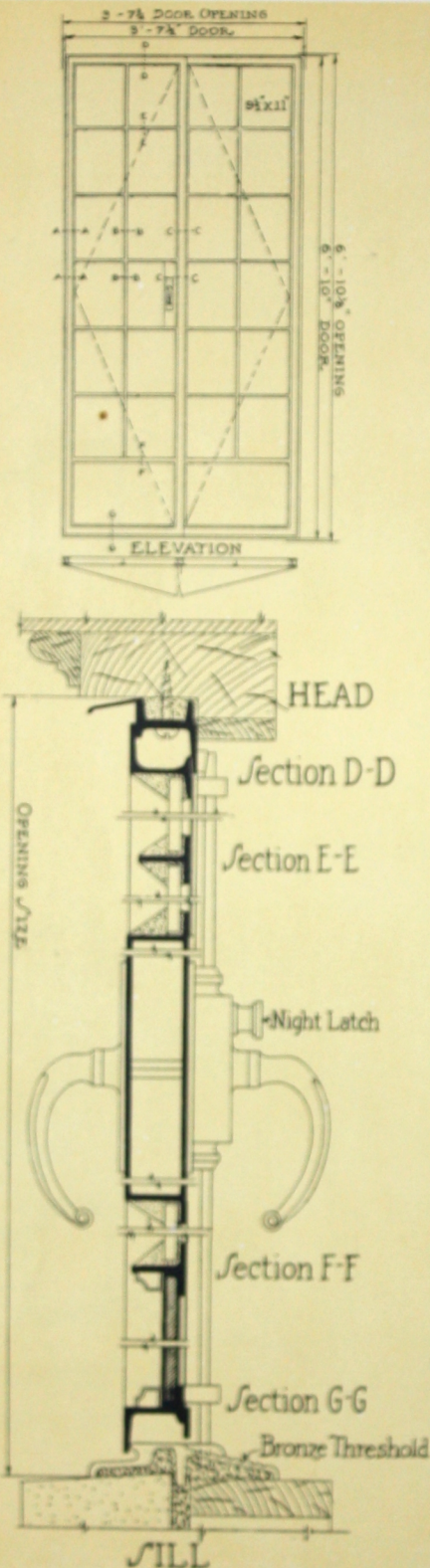
Thorn Standard French Casement doors are made to fit an opening $3'7\frac{3}{4}" \times 6'10\frac{1}{8}"$.

They are made of the Thorn medium type steel sections, electrically welded at the corners, and are arranged with a small kick panel, weatherdrips at the sill and heavy thresholds of extruded bronze. Glazing beads of moulded steel, carefully mitered and fitted, are attached to muntin bars by oval head screws.

The doors are hung on large bronze butt hinges and are carefully fitted at the factory to insure perfect double contact with frame on all sides.

The hardware supplied as standard equipment is of solid bronze of statuary finish and includes Cremorne bolts with scroll handles, top and bottom bolts and necessary screws. Night latches will be furnished for Cremorne bolts if doors are to be operated from both inside and outside, without extra cost.

The doors are painted at the factory with two coats of elastic gray enamel, each separately baked on.



THORN BASEMENT WINDOWS

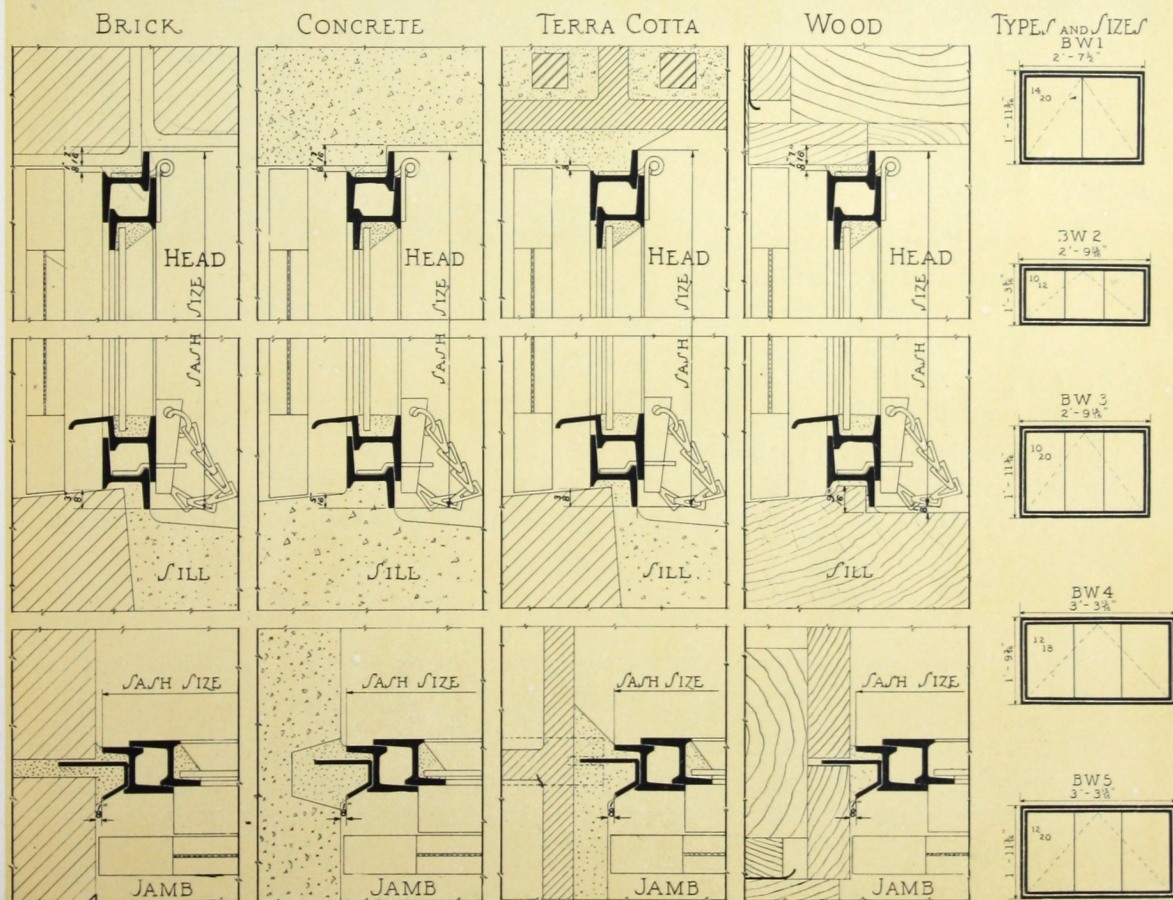
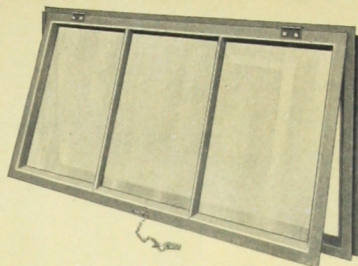
THE THORN basement window is made of steel casement sections, which give double flat contact on all sides and make the window weather-proof.

The sash is hung from the frame by butt hinges, which hold it tightly against the frame, and which are a permanent guarantee of smooth sash movement and against binding and breaking. The hinge is made with an easily removed pin, should it become necessary to remove sash from frame.

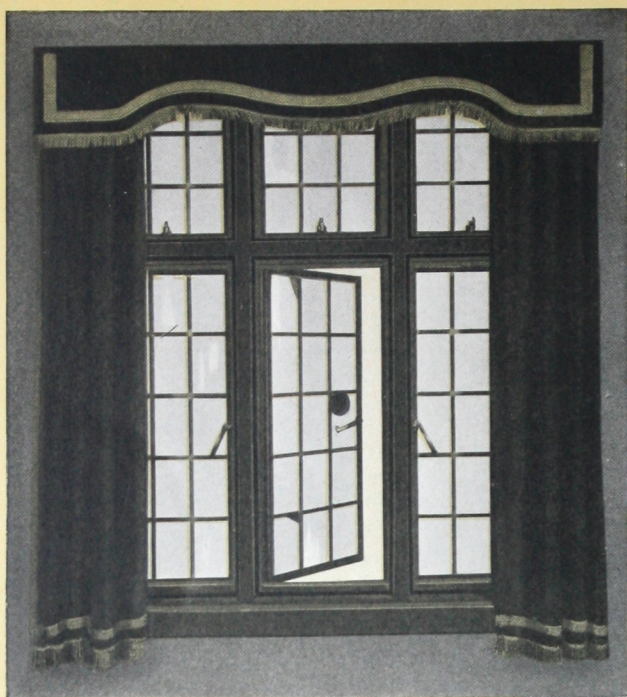
The windows are equipped with a self-centering locking wedge and ring for locking and ventilating.

They are shipped from the factory with all hardware attached, and are ready for setting in the openings without further preparation or fitting.

Glass is applied from the inside and each light after bed-puttying is held by wire clips furnished with the sash. The face putty is then applied, the same as in wood sash. *Holes are provided in frames for attachment of screens.*



DRAPERIES AND SCREENS



CASEMENT WINDOW OPENING WITH HEAVY
DRAPERIES AND VALANCE



CASEMENT WINDOW OPENING WITH LIGHT DRAPERIES WITHOUT VALANCE

DRAPERIES

Casement windows are beautiful, and if curtained with light, neutral tint draw curtains to control the light, will be found to give a most pleasing effect. Window coverings should not be used if they conceal any degree of beauty. However, for those who prefer to have their windows present a more formal atmosphere, appropriate over-draperies properly hung will result in beautiful window settings.

SCREENS

All outward opening casements must have inside screens, arranged so that they can be quickly opened and closed.

The screens can be either the rolling type, side hinged or sliding, and can be supplied by any reliable screen manufacturer. Various types of screens have been standardized for use in connection with outward opening steel casements.

A type of through-the-screen operator can be furnished with casements at an extra cost.

THORN MANOR CASEMENTS